

REMARKS

Claims 1-14 are pending in the application and have been rejected. Reconsideration and allowance of Claims 1-14 in view of the above amendment and the following remarks is respectfully requested.

The Rejection of Claims 1-3, 5-8, and 10-14 under 35 U.S.C. §103(a)

Claims 1-3, 5-8, and 10-14 are rejected under 35 U.S.C. §103(a) as being unpatentable over Westland et al. (U.S. Patent No. 6,572, 919) (Westland) in view of Casey (Pulp and Paper Chemistry and Chemical Technology, 3rd ed., Vol. III, John Wiley & Sons, 1981) (Casey) and Biermann (Essentials of Pulping and Papermaking, Academic Press, Inc., 1993) (Biermann), and further in view of Sprang et al. (U.S. Patent No. 5,571,604) (Sprang). Withdrawal of the rejection is requested for the following reasons.

Claim 1 has been amended to recite whitened crosslinked cellulosic fluff pulp fibers, obtained by a method including the steps of applying a whitening agent, crosslinking agent, and optionally a crosslinking catalyst to a web of fluff pulp fibers, separating the web of treated fibers into individualized treated fibers, and heating the individualized treated fibers to provide individualized whitened crosslinked fluff pulp fibers. Claims 2, 3, 5, and 12-14 depend from Claim 1.

Claim 6 has been amended to recite a method for making whitened crosslinked cellulosic fluff pulp fibers, including the steps of applying a whitening agent, crosslinking agent, and optionally a crosslinking catalyst to a web of fluff pulp fibers, separating the web of treated fibers into individualized treated fibers, and heating the individualized treated fibers to provide individualized whitened crosslinked fluff pulp fibers. Claims 7, 8, 10, and 11 depend from Claim 6.

The Westland reference, titled "Crosslinkable Cellulosic Fibrous Product," discloses crosslinked cellulosic fibers obtained by a method that includes applying a crosslinking agent,

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1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

such as citric acid, and a crosslinking catalyst, such as sodium hypophosphite, to a web of fibers, and separating the web into individualized fibers. In addition, the reference discloses that the fibers can be used to form absorbent products such as diapers, feminine care products, incontinence products and toweling.

The Casey reference, titled "Pulp and Paper," teaches that paper can be whitened by adding a blue dye because the dye is complementary to the natural yellow tint of pulp, although the addition of a dye reduces total reflectance. The reference discloses that yellowness is about four times as important to the visual perception of whiteness than total reflectance, thus a reduction of yellowness and an increase in whiteness is achieved by adding a blue dye. In addition, the reference teaches that the average person prefers a blue-white to a yellowish white.

The Biermann reference, titled "Essentials of Pulping and Papermaking," teaches that blue dye is often added to pulp to offset the tendency for pulp to be yellow.

The Sprang reference, titled "Adsorbent Fibrous Nonwoven Composite Structure," discloses an absorbent fibrous nonwoven structure comprising cellulosic fibers. The reference teaches that chemical additives such as pigments, dyes, or crosslinking agents, can be added to a fibrous web. In addition, the reference teaches addition of crosslinking agents to the pulp.

According to the Examiner, the art of cited references and the instant invention are analogous in that they are from the art of making fibrous absorbents, and that it would have been obvious at the time the invention was made to a person with ordinary skill in the art to add a blue azo dye to the formed web to increase whiteness of the fibrous product in the process of the Westland reference in view of the Casey and the Biermann references and further in view of the Sprang reference to make the product more preferable to customers. Applicants respectfully disagree.

There is no suggestion in the cited references to combine the Westland reference with the teachings of the Casey, Biermann, and Sprang references. According to the Federal Circuit, in

order to invoke the obviousness rejection, the prior art items themselves must suggest the desirability and thus the obviousness of making the combination without the slightest recourse to the teachings of the patent or application. Without such independent suggestion, the prior art is to be considered merely to be inviting unguided and speculative experimentation, which is not the standard with which obviousness is determined. *Amgen, Inc. v. Chugai Pharmaceutical Co., Ltd.*, 927 F.2d 1200, 18 USPQ 2d 1016 (Fed. Cir. 1991); *In re Laskowski*, 871 F.2d 115, 117, 10 USPQ2d 1397, 1398 (Fed. Cir. 1989); *In re Dow Chemical Co.*, 837 F.2d 469, 473, 5 USPQ2d 1529, 1532 (Fed. Cir. 1988); *Hodosh v. Block Drug*, 786 F.2d at 1123 n. 5, 229 USPQ at 187 n.5; *In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1985); *In re Regel*, 526 F.2d 1399, 1403 n.6, 188 USPQ 136, 139 n.6 (CCPA 1975).

The Westland reference teaches a fibrous web with latent crosslinking agent that can be rolled, transported, and used in rolled form in subsequent processes. The claimed invention relates to whitened crosslinked cellulosic fluff pulp. Compared to the teaching in the Westland reference, the claimed invention adds the element of whitening agent. There is absolutely no suggestion anywhere in the Westland reference to add a whitening agent to its fibrous web. The Westland reference addresses the transportation problem associated with crosslinked fibers. The color of the fiber is simply not a concern.

In addition, both the Casey and the Biermann references concern the papermaking industry. The claimed invention has been amended to recite "fluff" pulp fibers, which are useful for absorbent products such as diapers. There is no suggestion anywhere in either the Casey or the Biermann references to apply an azo dye to cellulosic fluff pulp for absorbent products. Applicants agree with the Examiner that the Sprang reference mentions adding crosslinking agents to the pulp mixture (column 6, line 51). However, the reference discloses the addition of "dyes" as a post-treatment process after the composite structure is formed. Because there is no

suggestion in any of the cited references to combine their teachings, the claimed invention is not obviousness.

Objective indicia of nonobviousness indicate that the claimed invention is nonobvious over the cited references. According to the Federal Circuit, finding obviousness through hindsight (i.e., after the fact of the invention and with the teachings of the inventor available) is impermissible and refuted by the objective indicia of nonobviousness. *In re Piasecki*, 745 F.2d 1468, 223 USPQ 785 (Fed. Cir. 1984); *In re Sernaker*, 702 F.2d 989, 217 USPQ 1 (Fed. Cir. 1983).

There is a long felt but unsolved need to have whiter fluff pulp fibers as indicated in the specification (page 2, line 31-page 3, line 35). The Casey reference was published in 1981. The Biermann reference was published in 1993. Applicants agree with the Examiner in that the use of a whitening agent to paper pulp is known. Yet, for over twenty years, no one has reported using a whitening agent, as disclosed in the Casey and Biermann references, to neutralize the natural yellowness of the fluff pulp, and provide a whiter fluff pulp. Therefore, the objective indicia supports the nonobviousness of the claimed invention.

Finally, the combination of the cited reference does not reasonably lead to the invention as now claimed. The Examiner seems to have made two leaps in his reasoning for the rejection without providing any support. First, the Examiner states that "the use of a whitening agent to whiten pulp is well know" after discussing teachings from the Casey and Biermann references. As the Examiner has recognized, both Casey and Biermann teach how to make paper appear whiter by adding a blue dye. With the teaching from the claimed invention in mind and without providing any evidence, the Examiner proceeds to suggest that the use of a whitening agent to whiten fluff pulp is also well known, despite the fact that for over twenty years after the publication of the Casey and Biermann references, no one has accomplished that. Second, from the teaching in the Sprang and Westland references, the Examiner concludes that "dyed and

crosslinked fibers are known in prior art." Based on this conclusion and without providing any evidence, the Examiner reasons that whitened crosslinked fibers are known in prior art. The Examiner seems to equate the word "dyed" with the word "whitened." According to Merriam-Webster Dictionary online (<http://www.m-w.com/dictionary/>), "dye" means "color from dyeing," "whitened" means "make white or whiter," and "white" means "free from color." Therefore, contrary to the Examiner's reasoning, "dyed" is opposite from "whitened" according to its common meaning. Thus, the combined prior art only teaches using a whitening agent to whiten paper pulp and dyed fibers and crosslinked fibers. Contrary to the Examiner's statement, there is no suggestion to make or evidence to support using a whitening agent to make whitened fluff pulp fibers and whitened crosslinked fluff pulp fibers in the cited references.

As the court in *In re Rouffet* has recognized, "invention itself is the process of combining prior art in a nonobvious manner." *In Re Ruffet*, 149 F.3d 1350, 47 U.S.P.Q.2d 1453 (Fed. Cir. 1998). The claimed invention solves a long felt need in the fluff pulp industry by introducing whitening agent into crosslinked fluff pulp fibers. The cited references fail to teach, suggest, or provide any motivation to make the claimed whitened crosslinked cellulosic fluff pulp fibers. The claimed invention is nonobvious and patentable over the cited references. Withdrawal of the rejection is respectfully requested.

The Rejection of Claims 4 and 9 under 35 U.S.C. §103(a)

Claims 4 and 9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the Westland, Casey, Biermann and Sprang references, as applied to Claims 1-3, 5-8 and 10-14 above, and further in view of Von der Eltz et al. (U.S. Patent No. 5,512,064) (von der Eltz). Withdrawal of the rejection is requested for the following reasons.

Claim 4 depends from Claim 1 and specifies that the blue dye is an azo metal complex dye. Claim 9 depends from Claim 6 and specifies that the blue dye is an azo metal complex dye.

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1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

The Von der Eltz reference, titled "Process for Modifying and Dyeing Modified Fiber Materials," teaches fiber materials that are modified with a polyalkyleneimine polymer at crosslinking agent. The reference teaches azo dyes and azo metal complex dyes, and provides examples on dyeing or printing fabric orange, yellow, turquoise, scarlet, blue and deep red.

According to the Examiner, even though the Westland, Casey, Biermann and Sprang references do not disclose the use of an azo metal complex dye as a blue dye, it would have been obvious to a person with ordinary skill in the art to add a blue azo metal complex dye as a functionally equivalent option to the fluff pulp to increase whiteness of the absorbent product in view of the von der Eltz reference. Applicants respectfully disagree.

In addition to the reasons stated above, the Von der Eltz reference teaches away from the claimed invention. The reference teaches how to dye and print the fabric with good all round fastness properties. The examples in the reference reinforced this notion by providing fabrics dyed or printed with bright colors. The reference could not be further away from making a "whitened" fluff pulp as in the claimed invention. As indicated above, "whitened" means "free from color." Therefore, by stressing dyeing fabric with bright colors, the Von der Eltz reference teaches away from the claimed invention.

Further, despite the fact that the Von der Eltz reference is in the fabric dyeing industry, which is different from the fluff pulp industry of the claimed invention and the paper industry as in the Casey and Biermann references, the Examiner combines the teaching in the references without citing any suggestion or motivation for the combination. Because the cited references fail to teach, suggest, or provide any motivation to make the claimed whitened crosslinked cellulosic fluff pulp, the claimed invention is nonobvious and patentable over the cited references. Withdrawal of this rejection is respectfully requested.

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS^{PLLC}
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

The Provisional Obviousness-Type Double Patenting Rejection

Claims 1-14 have been provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1, 3-6, 9-14, and 17-19 of co pending application No. 10/813,957.

Applicants note the provisional double patent rejection and will file a terminal disclaimer on the Examiner's indication of allowable subject matter.

CONCLUSION

In view of the above amendments and foregoing remarks, applicants believe that Claims 1-14 are in condition for allowance. If any issues remain that may be expeditiously addressed in a telephone interview, the Examiner is encouraged to telephone applicants' attorney at 206.695.1755.

Respectfully submitted,

CHRISTENSEN O'CONNOR
JOHNSON KINDNESS^{PLLC}



George E. Renzoni, Ph.D.
Registration No. 37,919
Direct Dial No. 206.695.1755

GER:md